

What is claimed is:

1. A light-emitting diode for large current driving, comprising:

5 a metal substrate provided with a distribution circuit formed on the surface thereof and electrically insulated therefrom;

a metal base directly attached to and thereby in thermally contact with said metal substrate, and provided with an LED chip mounted thereon;

10 a gold wire connecting said distribution circuit with said LED chip; and

15 a plastic lens attached over a surface of said metal substrate on which a surface said LED chip is mounted, said lens covering part of said metal base including at least said gold wire.

2. The light-emitting diode for large current driving according to claim 1, wherein a first through hole is formed in said metal substrate at least at one spot of which a 20 location is corresponding to that of said plastic lens and said plastic lens is attached through said first through hole.

3. The light-emitting diode for large current driving according to claim 1 or 2, wherein said metal base is attached 25 to said metal substrate by means of caulking or press fitting.

4. The light-emitting diode for large current driving according to any one of claims 1 to 3, wherein said metal base is composed of copper.

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5. The light-emitting diode for large current driving according to any one of claims 1 to 4, wherein said metal substrate is composed of copper or aluminum.

6. The light-emitting diode for large current driving according to any one of claims 1 to 5, wherein a space is formed on a rear of said plastic lens and between said plastic  
5 lens and said metal substrate to contain said LED chip, said gold wire and part of said metal base, and is filled with a silicone resin.

7. The light-emitting diode for large current driving  
10 according to claim 6, wherein at least one through hole is formed at a location in said metal substrate which a location corresponds to that of said space, and said silicone fills said space through said through hole.